

Application No.: 09/980,009

Docket No.: 21547-00284-US

AMENDMENTS TO THE CLAIMS

1. (Canceled)

2. (Canceled)

3. (Currently Amended) Arrangement according to Patent Claim 22, characterized ~~in that each~~ wherein the at least one body (1) is in the form of a spongy body or cloth saturated in or treated with the at least one bioactive substance, or a gel which comprises the at least one bioactive substance, and ~~in that wherein~~ the spongy at least one body, ~~the cloth or the gel~~ has a softness which permits distinct application in the ~~space concerned~~ open section while ~~at the same time~~ ensuring that ~~it the~~ the at least one body is held in place by frictional cooperation[[,]] or adhesive cooperation[[,]] with the an inner wall of the ~~respective space open~~ section.

4. (Currently Amended) Arrangement according to Patent Claim 22, characterized ~~in that~~ wherein the implant element has clinically effective geometrical properties and has the shape of a cylindrical or conical solid, and wherein the ~~with an~~ outer surface is arranged for direct contact with the ~~body bone or~~ tissue structure (2).

5. (Currently Amended) Arrangement according to Patent Claim 22, characterized ~~in that~~ wherein the implant ~~element consists of~~ at least one body comprises an absorbable collagen sponge.

6. (Currently Amended) Arrangement according to Patent Claim 22, characterized ~~in that~~ wherein the at least one bioactive substance is a substance belonging to the superfamily TGF-13.

7. (Canceled)

8. (Currently Amended) Arrangement according to Patent Claim 22, characterized ~~in that~~ wherein the axial hole extends from the ~~tipped end part~~ conical tip through the main head part of

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~~the implant body~~ in order to permit release of growth factors along the length of the implant ~~body-part element~~ through a suitable number of channels or recesses in the wall outer surface of the ~~implant or implant element~~.

9. (Currently Amended) Arrangement according to Patent Claim 22, ~~characterized in that~~ wherein the design(s) and structure(s) of the at least one body or bodies are chosen on the basis of predetermined release functions.

10. (Currently Amended) Arrangement according to Patent Claim 22, ~~characterized in that~~ wherein the at least one body comprises a first body and a second body, and wherein the a first body assumes a first position in which the first body is arranged with a first degree of exposure of a certain substance, and a the second body assumes a second position in which the second body has a second degree of exposure of the same certain substance, or of another substance, less than the first degree of exposure, or vice versa, for the purpose of permitting a controlled or optimum release function in a particular implant application the implant situation in question.

11. (Currently Amended) Arrangement according to Patent Claim 22, ~~characterized in that~~ wherein the at least one each body is arranged in such a way that, in the said a cooperation and release function, it the at least one body varies the a degree of release of the at least one bioactive substance, and, for example, effects a greater degree of release at the a start of the a release period than at the an end of the a release period[,]] or vice versa effects a greater degree of release at an end of a release period than at a start of a release period.

12. (Currently Amended) Arrangement according to Patent Claim 22, ~~characterized in that~~ wherein the design(s) or extent(s) of the space or spaces and any associated channels or recesses axial hole and the at least one radial through-hole are chosen on the basis of a predetermined or anticipated release function.

13. (Currently Amended) Arrangement according to Patent Claim 22, ~~characterized in that~~ wherein the channels or recesses axial hole and the at least one radial through-hole are arranged with different cross-sectional areas and/or or extents, which means such that different parts of the

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same a body or different bodies among the at least one body are subject to different degrees of exposure in the a release function, for the purpose of permitting a controlled or optimum release function for the at least one bioactive substance ~~or substances~~.

14. (Currently Amended) Arrangement according to ~~Patent~~ Claim 22, ~~characterized in that~~ wherein the at least one body comprises two bodies ~~are~~ situated at a distance from each other in order to serve different parts of the ~~surrounding bone and/or~~ tissue structure.

15. (Currently Amended) Arrangement according to ~~Patent~~ Claim 22, ~~characterized in that~~ wherein each the implant element and the at least one body ~~with associated body/bodies~~ can be built up or chosen from a number of ~~implants~~ implant elements which vary with respect to the axial hole and the at least one radial through-hole in respect of the spaces and any recesses and/or channels, and/or from a number of different bodies having different properties ~~in respect of the~~ with respect to release function and ~~substances~~ the at least one bioactive substance.

16. (Currently Amended) Arrangement according to ~~Patent~~ Claim 22, ~~characterized in that~~ wherein the at least one each body can be introduced into the ~~respective space~~ open section and, after introduction, can be saturated with bioactive substance, ~~for example~~ by means of an injection needle or a hand pump.

17. (Canceled)

18. (Currently Amended) Arrangement according to ~~Patent~~ Claim 3, ~~characterized in that~~ wherein the implant element has clinically effective geometrical properties and has the shape of a cylindrical or conical solid, and wherein the ~~with an outer surface is arranged~~ for direct contact with the body bone or tissue structure (2)).

19. (Currently Amended) Arrangement according to ~~Patent~~ Claim 3, ~~characterized in that~~ wherein the implant element consists of at least one body comprises an absorbable collagen sponge.

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20. (Currently Amended) Arrangement according to Patent Claim 4, ~~characterized in that wherein the implant element consists of at least one body comprises~~ an absorbable collagen sponge.

21. (New) A method for using an implant element for delivering at least one bioactive substance to bone or tissue structure surrounding an implant, comprising:

providing an implant element comprising:

a head part arranged to be acted upon by a turning tool,

a threaded outer surface, and

a conical tip opposite the head part;

providing an open section in the conical tip, wherein the open section comprises an axial hole that is open towards an end surface of the conical tip, and wherein the open section comprises at least one radial through-hole which communicates with the axial hole and extends radially through the implant element to the outer surface of the implant element;

providing at least one body in the open section, wherein the at least one body is arranged to permit direct release of the at least one bioactive substance from the body to the bone or tissue structure through the axial hole and the at least one radial through-hole;

and applying the at least one bioactive substance to the at least one body before or after providing the at least one body in the open section.

22. (New) An arrangement for an implant for delivering at least one bioactive substance to bone or tissue structure surrounding the implant during at least part of a period of incorporation of the implant in the bone or tissue structure, wherein the arrangement comprises:

an implant element comprising:

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a head part arranged to be acted upon by a turning tool,

a threaded outer surface, and

a conical tip opposite the head part, wherein the conical tip comprises an open section, wherein the open section includes an axial hole that is open towards an end surface of the conical tip, and wherein the open section comprises at least one radial through-hole which communicates with the axial hole and extends radially through the implant element to the outer surface of the implant element, and;

at least one body comprising the at least one bioactive substance, wherein the at least one body is disposed in the open section and is arranged to permit direct release of the at least one bioactive substance from the body to the bone or tissue structure through the axial hole and the at least one radial through-hole.